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09/986,427	11/08/2001	Takao Fujinuma	NIL-171	5257

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EXAMINER	
BURCH, MELODY M	

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,427	Applicant(s) FUJINUMA, TAKAO
	Examiner Melody M. Burch	Art Unit 3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of species I according to figures 1-10 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the only difference between the two species is the construction of the select position switch. This is not found persuasive because the construction of species II is not clearly shown. The parking gate switch S2 and the select position means 19a-c and 12a-c of the embodiment of figure 6 are clearly shown with respect to the rest of the components of the shift manipulating device. The parking gate switch S4 and the select position means S11-S17 of the embodiment of figure 11, however, are not clearly shown with respect to the rest of the components of the shift manipulating device.

The requirement is still deemed proper and is therefore made FINAL.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 3a described on pg. 9. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: element 3i in figure 5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because in figure 4 the lead line associated with the top element number 27 points to a different element compared to the lead line associated with the bottom element number 27. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show groove 4a in figure 2 as described in the specification in line 8 from the bottom of pg. 10. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Specification

8. The abstract of the disclosure is objected to because a period should be placed at the end of the last sentence of the abstract. Correction is required. See MPEP § 608.01(b).

9. The disclosure is objected to because of the following informalities: in line 6 from the bottom of pg. 12 "holer" should be changed to –holder–.

Appropriate correction is required.

Claim Objections

10. Claims 2-9, 14-16 are objected to because of the following informalities: the phrase "the holer" in line 5 of claim 2 should be changed to –the holder–. The remaining claims are objected to due to their dependency from claim 2. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> **The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

12. Claims 1-9 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1. The phrase "a second line" in line 10 from the bottom is indefinite. It is unclear to the Examiner how there can be claimed a second line without the previous recitation of a first line.

Re: claim 1. The phrase "a fifth path" in line 4 from the bottom is indefinite. It is unclear to the Examiner how there can be claimed a fifth path without the previous recitation of a fourth path.

Re: claim 2. The phrase "a second shaft" in line 5 is indefinite. It is unclear to the Examiner how there can be claimed a second shaft without the previous recitation of a first shaft.

Re: claim 3. The phrase "a perturbation groove" in line 4 is indefinite. It is unclear how the perturbation groove in line 4 is different from that claimed in lines 2-3. The perturbation groove of lines 2-3 involves the shift lever and the second line of the path. The perturbation groove of line 4 involves the P, R, N, and D ranges. Portions of the R range, for example, make up a part of the second line of the path. To avoid possible confusion, Examiner suggests the use of a qualifying term preceding the phrase "perturbation groove" to clearly distinguish one groove from another.

Re: claim 5. The phrase "a stopper...prevents the lock pin from entering into the lock-pin insertion hole" is indefinite in light of the drawings. Contrary to the claim recitation it appears that the stopper 23b along with the spring 16 prevent the lock pin from exiting the lock pin insertion hole 4j. Clarification is required.

Re: claim 16. The phrase "a first substrate" in line 4 is indefinite. It is unclear to the Examiner whether the first substrate claimed in claim 16 is intended to be the same or different from that claimed in claim 7. Clarification is required.

The remaining claims are indefinite due to their dependency from claim 1.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> **(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

14. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by JP-11227488 (referring to US Patent 6192770 to Miyoshi et al. as an English equivalent).

Miyoshi et al. show in figure 1 a shift manipulating device for an automatic transmission, comprising a path 2a, which is formed on an upper cover 2 of a control switch device and permits a shift lever 3 of the automatic transmission to be inserted therethrough to thereby restrict a direction of manipulation of the shift lever, wherein the path comprises operating positions composed of at least a P range, R range, N range, and a D range as shown, the P range, R range, N range and the D range being arranged in this order from a front side of a vehicle to the same extent as Applicant's, the shift lever being adapted to be disposed on three lines including a second line, third line and a fourth line in a right and left direction to the same extent as Applicant's; the P range is formed on an end of the path and arranged in a first path on the second line; the R range is arranged in a third path on the third line from the first path through a second path; the N range is arranged in a fifth path on the second line from the third path through a fourth path; and the D range is contiguous and adjacent to the fifth path and arranged in a sixth path on the second line as shown in figure 1 to the same extent as Applicant's due to the similar path construction of Miyoshi et al.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

16. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al. in view of US Patent 4646582 to Kijima.

Re: claim 2. Miyoshi et al. show in figures 1 and 4 the limitation wherein the shift lever has a knob 4a at an upper end thereof and a holder 5 at a lower end thereof, and the holder supports a second shaft 32 in a rotatable manner and is provided with a first shaft 31 shown in figure 4 which is perpendicular to the second shaft and is born by a casing 12.

Miyoshi et al. lack the limitation of the holder being provided with a perturbing body which is biased by a perturbation spring.

Kijima teaches in figure 5 a shift manipulating device wherein a shift lever 16 has a holder 14 at a lower end thereof, the holder being provided with a perturbing body 30 which is biased by a perturbation spring 28.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the holder of the shift manipulating device of Miyoshi et al. to have included a perturbing body biased by a perturbation spring, as taught by Kijima, in order to provide a means of effectively maintaining a range selection after a shift lever triggered speed change takes place.

Re: claim 3. Miyoshi et al., as modified, teach in figure 5 of Kijima the limitation wherein the perturbing body is in pressure contact with a perturbation groove surrounding elements 32 such that it is capable of returning the shift lever to the second line of the path, and a perturbation groove or element 32 capable of supporting the shift lever in the P range, R range, N range and the D range. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the range selection means of Miyoshi et al., as modified, to have included the perturbing body being in pressure contact with a perturbation groove, as taught by Kijima, in order to provide an old and well-known means of effecting and maintaining speed changes or range selections.

17. Claims 4, 5, 7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al. in view of US Patent 4646582 to Kijima as applied to claims 2 or 3 above, and further in view of US Patent 4519266 to Reinecke.

Re: claims 4 and 5. Miyoshi et al., as modified, describe the invention substantially as set forth above, but lack the limitation of the holder mounting a lock pin laterally thereof that is capable of preventing the shift lever on the second line from moving toward the third line.

Reinecke teaches in figure 1 the use of a shift lever 1 having a holder 4 mounting a lock pin 15 laterally thereof capable of preventing the shift lever on the second line from moving toward the third line. The lock pin 15 is biased by a spring as shown and arranged in a lock-pin insertion hole or hole surrounding the spring in a manner to be capable of incoming and outgoing, the lock-pin insertion hole being formed in an inner

wall of the casing as shown and a stopper 3 (the left portions of which) movably arranged on a back portion of the lock pin prevents the lock pin from entering into the lock-pin insertion hole by virtue of the spring seat provided by the back portion of the stopper which helps to bias the lock-pin away from the lock-pin insertion hole, as broadly claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Miyoshi et al., as modified, to have included the holder mounting a lock pin laterally thereof, as taught by Reinecke, in order to provide a means of stopping the rotation of the holder to maintain a desired range selection.

Re: claim 7. Miyoshi et al., as modified teach in figure 4 of Miyoshi et al. the limitation wherein the first shaft has a rotor 13 for rotation with the first shaft, but does not include the limitation of the rotor being provided with a magnet and a first substrate being provided near the rotor to mount thereon magnetism sensing elements which are responsive to magnetism of the magnet.

Reinecke teaches in figure 1 the use of a shift manipulating device wherein the first shaft 5 has a rotor 4 adapted for rotation together with the first shaft and provided with a magnet 6, and a first substrate 38 is provided near the rotor to mount thereon magnetism sensing elements 9 which are responsive to magnetism of the magnet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the rotor and the shift manipulating device of Miyoshi et al., as modified, to have included a magnet and a nearby first substrate

having magnetism sensing elements, respectively, as taught by Reinecke, in order to provide a means of sensing the shift path selected as taught by Reinecke in col. 2 line 3.

Re: claim 16. Miyoshi et al., as modified, teach in figure 4 of Miyoshi et al. the limitation wherein the holder is provided on a side thereof with a pushing portion 28 for opening and closing a parking gate switch 44, as broadly claimed, and a first substrate 43 is provided near the holder to mount thereon via elements 45 and 46 the parking gate switch.

18. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinecke in view of Miyoshi et al. and Kijima.

Re: claim 10. Reinecke shows in figure 1 a shift manipulating device comprising a path through which element 1 travels as shown in phantom, which is formed on an upper portion of a control switch device and permits a shift lever 1 of a transmission to be inserted therethrough to thereby restrict a direction of manipulation of the shift lever, wherein the shift lever has a lower end thereof shown in the area above element 5 disposed within a casing 2,38 which is connected to the upper portion, and an electrode board 14 is provided in the casing particularly in portion 38 of the casing to mount thereon electric parts as disclosed in lines 31-32 of col. 2 of an actuator control circuit device for actuating an actuator 4,6,9 capable of preventing movements of the shift lever.

Reinecke lacks the limitation of the transmission specifically being automatic and the limitation of the upper portion of the control switch device being an upper cover mounted to the casing.

Miyoshi et al. teach in line 1 of the abstract the use of a shift device being used in the environment of an automatic transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the transmission of Reinecke to have been automatic, as taught by Miyoshi et al., in order to provide a gear shifting means less dependent on vehicle operator actions.

Kijima teaches in figure 5 the use of a shift manipulating device wherein a casing 4,8 is mounted to an upper cover 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the construction of the shift manipulating device of Reinecke, as modified, to have included a casing mounted to an upper cover, as taught by Kijima, in order to provide a means of making the internal components of the device more readily accessible to facilitate component inspection or replacement.

Re: claim 12. Reinecke, as modified, teach in figure 1 of Reinecke the limitation wherein the casing mounts in a lower area therein a bottom plate portion 4 formed with a perturbation groove shown to the right of element 15 with which a perturbation body 15 provided on a holder 3,10 at a lower end of the shift lever 1 comes into pressure contact, and mounts on an inner wall thereof (of the casing, particularly portion 38 of the casing) the electrode board 14 and a second substrate 11 is arranged below the bottom

plate portion to connect thereto via the magnetic field between elements 12 and 13 terminals or electrical connections disclosed in col. 2 lines 30-31 mounted on the electrode board.

19. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinecke in view of Miyoshi et al. and Kijima as applied to claim 10 above, and further in view of US Patent 5917701 to Solberg.

Re: claim 11. Reinecke, as modified, lacks the limitation of the electric parts being mounted on a heat sink mounted on the electric board.

Solberg teaches in col.1 lines 25-27 the use of components being mounted on a heat sink which in turn is mounted on a board.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the electric parts/electrode board arrangement of Reinecke, as modified, to have included a heat sink to which the electric components are attached, as taught by Solberg, in order to provide a means of improving the dissipation of heat generated by the electric parts.

Re: claim 12. Reinecke, as modified, teach in figure 1 of Reinecke the limitation wherein the casing mounts in a lower area therein a bottom plate portion 4 formed with a perturbation groove shown to the right of element 15 with which a perturbation body 15 provided on a holder 3,10 at a lower end of the shift lever 1 comes into pressure contact, and mounts on an inner wall thereof (of the casing, particularly portion 38 of the casing) the electrode board 14 and a second substrate 11 is arranged below the bottom plate portion to connect thereto via the magnetic field between elements 12 and 13

terminals or electrical connections disclosed in col. 2 lines 30-31 mounted on the electrode board.

20. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kijima in view of Miyoshi et al. and US Patent 4283722 to Kito et al.

Kijima shows in figure 5 a shift manipulating device for a transmission, comprising a path through which element 16 travels as shown in phantom which is formed on an upper cover 2 of a control switch device and permits a shift lever 16 of the transmission to be inserted therethrough to thereby restrict a direction of manipulation of the shift lever and wherein the shift lever has a lower end thereof disposed within a casing 4,8 which is mounted on the upper cover, but does not show the limitation of a the transmission specifically being automatic or the limitation of a buzzer being arranged in the casing.

Miyoshi et al. teach in line 1 of the abstract the use of a shift device being used in the environment of an automatic transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the transmission of Kijima to have been automatic, as taught by Miyoshi et al., in order to provide a gear shifting means less dependent on vehicle operator actions.

Kito et al. teach in figure 2 the use of a device having a lever 2 including a buzzer 9 being arranged in a casing 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the casing of Kijima, as modified, to have included a buzzer, as taught by Kito et al., in order to provide a means of conveying a warning.

Allowable Subject Matter

21. Claims 6, 8, 9, 14, and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Miyoshi et al., as modified, fails to teach or suggest the limitation of the stopper being swung by an actuator via a linkage as recited in claim 6.

Claim 8 recites the holder being provided with a magnet. The Reinecke reference is used to teach the use of the magnet, however, the magnet is located on element 4 which was already designated as the rotor. Element 4 cannot be used to designate both the rotor as claimed in claim 7 and the holder as recited in claim 8.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 6120412 to Fujinuma teaches the use of a shift device having a laterally arranged lock pin 11 being associated with a linkage and an actuator but does not show a stopper as claimed, US Patent 4218938 to Hattori teaches the use of a shift lever having a holder with a magnet, the magnet being associated with surrounding magnetism sensing means, and US Patent 5695029 to Yokoyama et al. teaches the use of a shift device having a similar gear selection path.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 9, 2004
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Melody M. Burch